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Gender differences in bipolar disorder: a descriptive study

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GENDER DIFFERENCES IN BIPOLAR DISORDER: A DESCRIPTIVE STUDY

by
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ABSTRACT

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GENDER DIFFERENCES IN BIPOLAR DISORDER: A DESCRIPTIVE STUDY.

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Master of Arts Degree Program in the Graduate Division of School Psychology of Rowan College of New Jersey

May 1995

The purpose of this study was to create a profile of bipolar disorder in an adult psychiatric setting. Comparisons were made between gender and disposition upon hospitalization. Relationships between gender and substance abuse; and gender and incarceration were also studied.

A sample of seventy-seven bipolar patients were studied, using descriptive statistics. Of the seventy-seven subjects, fifty-two were females and twenty five were male.

It was found that females are not more likely to be hospitalized in a manic state of their bipolar illness as opposed to a depressed state. In the sample of male bipolar subjects that were studied, hospitalization occurs more frequently in a manic state of their illness as opposed to a depressed state.

Histories of substance abuse were prevalent in both male and female subjects. Incidence of incarceration were found only in male subjects.

MINI-ABSTRACT

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This study was to determine if there are gender differences in bipolar disorder. In this study it was found that male bipolar patients are more likely to be hospitalized in a manic state of bipolar illness. There was no difference found in the disposition of female bipolar patients studied, upon hospitalization.

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CHAPTER I

THE PROBLEM

THE PURPOSE OF THIS STUDY

The purpose of the present study is to create a profile of bipolar disorder in an adult psychiatric setting, to add to the existing body of knowledge already available. Medical charts will be reviewed of randomly selected males and females from a community hospital in west central New Jersey.

The correlation between gender and the symptoms precipitated prior to hospitalization will be studied. This study will determine whether male subjects are hospitalized more frequently in their manic state of bipolar disorder, as opposed to their depressed state. Conversely, if female subjects are hospitalized more frequently in a depressed state of bipolar disorder as opposed to the manic state.

Female patients may be more apt to seek professional treatment for their depressive symptomology, whereas male patients may have a tendency towards isolating themselves, not wanting to present themselves as vulnerable; not wanting

their masculinity challenged. In contrast, male patients in a manic state may be more overt in their irrational behavior, possibly becoming involved in criminal activity, therefore, increasing the risk of hospitalization. Female patients exhibiting manic symptoms may be tolerated in treatment on an out-patient basis, reducing their risk of hospitalization.

THE HYPOTHESES

1). It is hypothesized that female bipolar patients will, more likely, be exhibiting depressive symptoms of bipolar disorder upon hospitalization.

2). It is hypothesized that male bipolar patients will, more likely, be exhibiting manic symptoms of bipolar disorder upon hospitalization.

THEORY

Differences in male and female traits have been rooted in psychoanalytic theory beginning with Sigmund Freud, whose influence in psychoanalytical concepts have been world renowned. Freud theorized a significant difference between male and female development. According to Freud, these difference begin in the fourth and fifth years of childhood, referred to as the phallic stage. In this stage both male and female children are aware of a sexual relationship between parents, but they respond to the relationship through different means. The male child seeks love and affection from the mother and perceives the father as a rival. The male child then fears punishment from the father, more specifically castration anxiety. To alleviate his anxiety the male child seeks identification with the father, therefore, channeling his sexual desire to more socially acceptable behavior. The female child responds differently during the phallic stage, she resents the mother for not bringing her into the world with a penis and loves the father for his desired object. The female child then identifies with the mother to vicariously obtain the desired object. In Freud's view, penis envy produced feminine inferiority, resulting in masochistic tendencies. Females turn their destructive tendency inward and become sexually passive.

Karen Horney, a neo-Freudian also stressed differences among males and females in our society. Horney, put greater emphasis on socio-cultural conditions and de-emphasized the role of biology. She stressed that our patriarchal society indoctrinated males and females with the assumption of male superiority and female inferiority. In a civilization that is essentially masculine, men will be placed in a dominant position, forcing women in a position of subservience; wishing for all those qualities and privileges associated with masculinity. Society influences women by blocking their strivings for achievement in male dominated occupations; fostering economic dependency; and reinforcing their preceived inferiority to men.

Erich Fromm also stressed the importance of socio-cultural indoctrination of male and females. Fromm observed cultures ruled either by a matriarchal society or a patriarchal society and found profound differences in both, and both having positive and negative factors. In the matriarchal societies, a sense of equality and freedom were present, whereas, the patriarchal societies produced fear and awe of the authority figure. Albeit, in the male dominated societies was a sense of individualism and discipline, contrary to female societies that stifled the uniqueness of the individual.

Moving away from socio-cultural influences and re-focusing on the individual psyche as related to gender differences, brings the focus to Carl Jung. Jung collaborated with Freud from 1906-1913, the association collapsed over disagreements of theory. Jung argued against the importance of the sex instinct, and Freud's pre-occupation with the pathological side of human nature.

Jung has classified personality types into two basic attitudes - introverted type and extroverted type. Within these two basic types are four functions considered to be the thinking type, feeling type, sensing type and intuitive type. Jung judged men to be prime examples of the extroverted sensing type, characterized as reality oriented, out-going, and able to enjoy the finer things in life. Women were judged to be prime examples of the introverted feeling type. This type is characterized by inaccessibility, melancholic and hard to understand.

Observed differences in play activity has also been noted among male and female children. Erik Erickson, known for his psychoanalytical ego psychology, distinguished these differences. In male, the penis is represented by high buildings and towers that stand-out in comparison to other objects, there was also a fascination with fast cars. In contrast, female play centered around houses, which he interpreted as representing the vagina, that were "static" and had "low enclosures". Erickson further stated that

males need to express their need to be strong and agressive, whereas, the females need to concentrate on the anticipated role of wife and mother. These needs are based on biology, although biology is solely not responsible for behavior, he contended that personality and history played a role (Ryckman, 1985).

DEFINITIONS

BIPOLAR DISORDER: a clinical course that is characterized by the occurrence of one or more manic episodes and one or more major depressive episodes. In addition, the episodes are not better accounted for by schizoaffective disorder and are not superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or psychotic disorder not otherwise specified.

MANIC EPISODE: a distinct period of abnormally and persistently elevated, expansive, or irritable mood. During the period of mood disturbance, three of the following symptoms have persisted and present to a significant degree: inflated self-esteem or grandiosity; decreased need for sleep; more talkative than usual or pressure to keep talking; flight of ideas or subjective experience that thoughts are racing; distractibility, i.e., attention too

easily drawn to unimportant or irrelevant external stimuli; increase in goal directed behavior or psycho-motor agitation; and excessive involvement in pleasurable activities which have a high potential for painful consequences, e.g., unrestrained buying sprees, sexual indiscretions, or foolish business investments. Mood disturbances sufficiently severe to cause marked impairment in occupational functioning or in usual social activities or relationships with others.

MAJOR DEPRESSIVE EPISODE: at least five of the following symptoms have been present during the same two week period and represent a change from previous functioning, these do not include symptoms due to physical conditions: depressed mood most of the day, nearly every day; markedly diminished interest or pleasure in all, or almost all, activities, most of the day, nearly every day; significant weight loss or weight gain when not dieting, or decrease or increase of appetite nearly every day; insomnia or hypersomnia nearly every day; psychomotor agitation or retardation nearly every day; fatigue or loss of energy nearly every day; and recurrent thoughts of death and suicidal ideations. The aforementioned symptoms are not due to an organic factor, and are not a normal reaction to the death of a loved one.

ASSUMPTIONS

For the purpose of this study, it is assumed that all diagnosis of bipolar disorder were accurately made by a board certified psychiatrist, using diagnostic criteria from the DSM-III-R manual. It is also assumed that the sample size chosen represents the total population of those who could have possibly been chosen for this study.

OVERVIEW

In the following chapter, Chapter II, research in the area of Bipolar disorder will be examined and compared. Research in this area of psychiatric disorder is immense and will be categorized, including preventive techniques in the treatment of Bipolar disorder. Specific research in the area of Bipolar disorder as related to gender is not available. Research on other psychiatric disorders, as related to gender, will be reviewed and compared.

Chapter III, will discuss the design of this study, including sample size and measures. This information will lead to the analysis of results, to conclude with a summary of the research.

CHAPTER II

REVIEW OF LITERATURE

The following review is an attempt to pull together information on bipolar disorder that is germane to the hypothesis being studied. This review will take into account the history of bipolar disorder, gender stereotypes, biological gender differences, and treatment.

Depression and mania are referred to as affective disorders, although the critical pathology in these disorders is one of mood, that is, the internal emotional state of a person; and not of affect, that is, the external expression of emotional content (Kaplan & Sadock, 1988). Normal individuals experience a wide range of moods and feel in control of these moods. When one loses control of their mood and has a subjective experience of great distress it is considered a clinical condition of a mood disorder.

HISTORY

Written descriptions of mood disorders have been dated back to Pharonic Egypt, but only recently has a reliable, structured, diagnostic system been used. The demand to keep treatment individualized prompted the American Psychiatric Association (APA) to develop a classification system that would reflect the current knowledge about mental disorders, therefore leading to the development of the Diagnostic Statistical Manual (DSM). The DSM is considered to be a tentative system of psychiatric classification, intended to change as new research and development in psychiatry come under way.

In 1854, Jules Falret described a condition called folie circulare in which the patient experienced alternating moods of depression and mania. Around thirty years later, Karl Kahlbaum, a German psychiatrist, described mania and depression as different states of the same illness and termed it cyclothymia. Building on the established knowledge set forth, in 1899, Emil Kraeplin described manic-depressive illness using the same criteria that psychiatrists currently use for diagnosing bipolar disorder (Papalos & Papalos, 1992).

GENDER STEREOTYPES

Kohlberg, in his theory on moral development stated that women reached their abstract goal more infrequently because of their tie to others, therefore, failing to develop. For males, separation and individuation; the capacity for aggressive activity; and their striving towards independence is critical to the development of masculine identity. In female development, the greater involvement in personal relationships not only becomes a descriptive difference, but is perceived as a developmental liability (Corgell, Endicott & Winokur, 1993).

The frequency of depression in women suggests that depression may not be an illness super-imposed on a different personality structure, but may be a distortion of the normative state of being female in our Western society (Kaplan, 1992). Existing theories on depression are rooted in the male experience, with women understood in terms of what they are missing. Women's growth is based on development of relationships, whereas men's growth is towards separation and individuation. Connection with

others should not be a detraction from one's self-enhancement, but should create a sense of empowerment. The extent to which women can and do feel empowered by their relational capacities is dependent on the extent of societal and individual valuing of these strengths. Albeit our society does not value these attributes, but interprets them as weaknesses.

When a person feels powerlessness they are unable to act and become immobile. Such inhibitions may lead to clinical depression. Beck's cognitive theory identifies such inhibitions as the behavioral result of negative cognitions about the self and the future. According to Seligman, learned helplessness is a consequence of not having control over one's behavior.

The psychoanalytic viewpoint states that the internalized feeling of anger is a key element of depression. The angry reactions caused by the behavior of others are experienced not as anger with other but as an attack on the self. The experience of loss is also stated to be at the core of depression. Since women place much emphasis on relations, that is, taking part in a mutually affirming relationship and being affectively connected to another, this may result in a greater vulnerability towards depression (Notman, 1990).

A sex-role stereotype questionnaire was given to seventy-nine clinicians to test the hypothesis that clinical judgments about the traits characterizing healthy, mature individuals will differ as a function of the sex of the person judged. The sex-role stereotype questionnaire consisted of 122 bipolar items and was given to forty-six male clinicians and thirty-three female clinicians. Results indicated that high agreement exists among both male and female clinicians as to the attributes characterizing healthy adult men, healthy adult women and healthy adults, sex unspecified. Clinicians have different concepts of health for men and women and these differences parallel the sex-role stereotypes. The clinicians' concepts of a healthy, mature man do not differ significantly from their concepts of a healthy adult. However, the clinicians concepts of a healthy, mature woman do differ significantly from their adult health concepts. They are significantly less likely to attribute traits which characterize healthy adults to a women than they are likely to attribute these traits to a healthy man (Broverman, Broverman, Clarkson, Rosenkrantz & Vogel, 1992).

BIOLOGICAL GENDER DIFFERENCES

Evidence suggests that there are gender-related variations in absorption of medication. Women have a higher plasma level of psychotropic (tranquilizing) medication and there is a greater efficacy of antipsychotic medications and a greater risk of adverse reactions. Adverse reactions include hypothyroidism and tardive dyskinesia, a movement disorder characterized by involuntary movements of face and body. In bipolar women, more adverse reations to lithium may occur, such as lithium induced hypothyroidism (Cole, Rand & Yonkers, 1992).

Other biological gender differences are seen in the structure of the brain. Patients with first-episode mania demonstrated significantly larger third ventricular volumes and differences in gray/white matter distribution compared with normal subjects, as measured by magnetic resonance imaging (MRI) in both male and female patients. Differences in gray and white matter distribution were more prominent in women patients possibly indicating the differences between genders in the pathogenesis of bipolar disorder, but evidence remains inconclusive (Stoll, Stratowski, Tohen, Wilson & Woods, 1993).

TREATMENT ISSUES

The Greek physician Galen treated people with mania one-thousand years ago by bathing them in alkaline springs and having them drink from the waters. In 1957, Danish psychiatrist Mogens Schou, brought lithium to world attention. In 1974 it was finally approved by the U.S. food and drug administration (FDA). Lithium is the drug of choice in treating mania, which used preventively reduces the possibility of future episodes. Clinical remission or marked improvement is seen in about 70% of patients treated with lithium. In addition to the use of lithium treatment, electroconvulsive therapy (ECT) has been used for treating acute mania. Prior to ECT treatment, the patient is put to sleep with a short-acting barbiturate, and the drug succinylcholine is given to temporarily paralyze the muscles (Mukherjee & Schnaur, 1994). This is needed so the muscles do not contract during treatment resulting in fractures. An electrode is then placed above each temple and a small current of electricity is passed through the brain, producing a seizure. ECT is indicated when the patient does not respond to pharmacology.

Treatment issues go beyond medication to relieve painful symptoms, patients also need education on the nature and course of the bipolar illness. Supportive psychotherapy is also utilized to allow for open communication between therapist and client; strengthening the capacity of the person to cope more effectively with the illness dealing with family issues and interpersonal relationships; and assessing negative patterns of thinking. In manic state, patients tend to feel more creative and intelligent and when this mood levels off they are left to deal with their natural limitations and realities of life.

Hospitalization is warranted when the symptoms become severe enough to disrupt daily functioning. In a depressed state, the symptoms may be disrupted sleep and appetite; and feelings of hopelessness and helplessness. In a manic state, symptoms may include poor impulse control, sexual indiscretions or violent behavior. Hospitalization provides a protective environment where there is no judgment or recrimination over unusual behavior. The hospital setting removes out-of-control bipolars away from their work or social environment, thereby limiting the damage that can be done to themselves or others.

OTHER STUDIES IN GENDER

A study was done on the efficacy of a forensic case management program intended to support the adjustment of the homeless, seriously mentally ill upon leaving jail. One hundred and twenty-eight subjects were studied, 14% classified as bipolar disorder. Gender was found (along with living situation) to be one of the most important variables in explaining the differences among community mental health clients with and without arrest histories. Clients with arrest histories were more likely to be found male (Draine & Solomon, 1992).

SUMMARY AND CONCLUSIONS

The review of literature indicates that there are differences in males and females, in both biology and societal influence. The experience of having a bipolar illness will be effected by gender.

Research on the topic reflected a psychoanalytical viewpoint, therefore limiting the reliability of conclusions drawn. The research on the biological aspects of gender difference, although extremely interesting, offered more heuristic value rather than conclusive evidence.

CHAPTER III

DESIGN OF STUDY

SAMPLE

The sample consisted of seventy-seven out-patient clients, from a community mental health center. The community mental health center is located within a community hospital in an affluent, rural area of western New Jersey. The sample population all were out-patients identified with the diagnosis of bipolar disorder. The sample consisted of twenty-five bipolar males and fifty-two bipolar females. The mean age of patients was 42 years old, with a standard deviation of 13.

MEASURES

Charts were drawn from a computer print-out that specifically searched for out-patient clients with the diagnosis of bipolar disorder. The diagnosis of bipolar disorder was obtained by patients exhibiting symptoms of bipolar disorder that meet the criteria of the DSM-III-R category. Only diagnoses made by psychiatrists were used.

One-hundred and three patients were identified with the diagnosis of bipolar disorder. All charts were searched for in the files. Seventy-seven clients were actually used for the study. Excluded clients were as follows: three clients excluded due to age, (no adolescents were used in this study); four clients excluded due to lack of hospital inpatient stays indicated; two clients excluded as diagnosis other than bipolar had been indicated; seventeen client charts could not be located. Once a chart was obtained, data was taken from the psychiatric admission summary of their last hospitalization to determine whether the patient was exhibiting depressive or manic symptomolgy. Mental status exams that described mood, affect, and behavior were reviewed at the time of admission. Records of last hospitalization reviewed only, due to hospitalization summaries not consistently in the charts.

DESIGN

Descriptive statistics such as percentages will be utilized to summarize and asses collected data. Correlational statistics will be utilized to describe relationship between bipolar disorder, alcohol abuse, and incarceration.

SUMMARY

Mental status exams taken at the time of admission into the hospital, that describe mood, affect and behavior were not always taken by the same psychiatrist. There may have been different styles of accessing information that may or may not have effected the patient's mood, affect, and/or behavior.

CHAPTER IV

ANALYSIS OF RESULTS

INTRODUCTION

This chapter will review the hypotheses and will determine if the hypothesis testing wielded significant results. The results were categorized into four sections: female patients exhibiting manic behavior; female patients exhibiting depressed behavior; male patients exhibiting manic behavior; and male patients exhibiting depressed behavior. All groups included the variables of age, substance abuse history, use of lithium and history of incarceration.

HYPOTHESES

Hypothesis 1

1 a) H1 Null hypothesis: No differences in manic or depressive symptoms will be found in female bipolar patients upon hospitalization.

1 b) Alternative hypothesis: Female bipolar patients, will more likely, be exhibiting depressive symptoms of bipolar disorder upon hospitalization.

Hypothesis 2

1 a) H2 Null hypothesis: No differences in manic of depressive symptoms will be found in male bipolar patients upon hospitalization.

1 b) Alternative hypothesis: Male bipolar patients, will more likely, be exhibiting manic symptoms of bipolar disorder upon hospitalization.

SUMMARY

It was found through analysis of the data, that females are not more likely to be hospitalized in their depressive phase of bipolar disorder as opposed to their manic phase. Forty-five percent of females were hospitalized in a depressed state whereas fifty-five percent were hospitalized ina manic state. According to these percentages the null hypothesis can be accepted and the alternative hypothesis rejected.

It was found through analysis of the data that males are more likely to be hospitalized in a manic state of bipolar illness, as opposed to a depressive state. Thirty-six percent of males were hospitalized with depressive symptoms, whereas sixty-four percent were hospitalized exhibiting manic symptoms of bipolar disorder.

Bentler's coefficient of concordance showed a high magnitude between hospitalized male bipolar patients and history of incarceration.

Males exhibiting manic symptoms have a positive correlation to incarceration, 31.25% of males exhibiting manic symptoms prior to hospitalization have an incidence of incarceration. There was no history of incarceration among

female bipolar patients. Histories of substance abuse were found in both male and female patients of bipolar disorder. Forty-five percent of male bipolar patients had a positive history of substance abuse and 32.65% of female bipolar patients had a positive history of substance abuse. The high level of substance abuse across gender may indicate a need to self medicate. The use of substances, primarily alcohol, induces a calming effect or an effect of stimulation.

Of the seventy-seven subjects studied, fifty were females and twenty-five were males. There was a higher proportion of females hospitalized, overall. Sixty-nine percent of the females were on the medication lithium and forty percent of males were on lithium. Medication compliance was higher among females, although it is indicated from previous research that females have a higher incidence of side effects from medication.

CHAPTER V

SUMMARY AND CONCLUSION

The purpose of this study was to create a profile of bipolar disorder in an adult psychiatric setting. The differences in gender was the focus of the research, looking at differences in female and male bipolar patients upon hospitalization.

Seventy-seven out-patients with the diagnosis of bipolar disorder were studied. It was hypothesized that female bipolar patients would more likely be hospitalized during a depressive state of their illness conversely, male bipolar patients would more likely be hospitalized in the manic state of bipolar illness. This assumption was based on differing societal values on males and females.

Through descriptive statistics, it was found that females are not more likely to be hospitalized in their depressive state as opposed to their manic state. Approximately half of the female subjects were hospitalized in either a manic or depressive state. Males, on the other

hand, were more likely to be hospitalized in a manic state of their bipolar illness. In fact, males also were more likely to have criminal involvement, as indicated by previous research.

DISCUSSION

To exemplify the gender issues in treatment, presented are two cases of bipolar disorder. It is presented as an anecdotal account of the differing, subjective experience of coping with a cyclical, pervasive mental illness. One female and one male client were chosen for comparison. Both clients were in treatment on an out-patient basis, both clients committed suicide. The course of the illness in the female client was characterized by isolation, repeated hospitalization, repeated self mutilation and death by overdose. The male, however, displayed a much more aggressive way of acting out, including drug abuse, destruction of property, and death by hanging. Their coping mechanisms reflect the psychoanalytical view on gender, that is, the females attack on the self and the passivity of the suicidal act. In the case of the male, his behavior was expressed outward and the suicidal act was much more aggressive. These two cases illustrate gender characterized differences in behavior.

IMPLICATIONS FOR FURTHER RESEARCH

As stated, there is an innate difference in the way in which males and females manifest symptoms of and experience subjectively bipolar disorder. The ramifications of these differences have direct bearing on the fundamental nature of both genders. In the search for treatment of the construction of an over-all understanding of these profoundly, fundamentally sex-related differences could prove pivotal.

The ever present dialogue between societal influences and innate biological differences presents a self-unfolding challenge which bears upon both the development of treatment for this disorder and the quest for understanding of the human psyche as a whole. The complexities of the relationship between genders is also implied, possibly being helpful as contributing to the enrichment and expansion in social work, substance abuse counseling, marital counseling, and so on.

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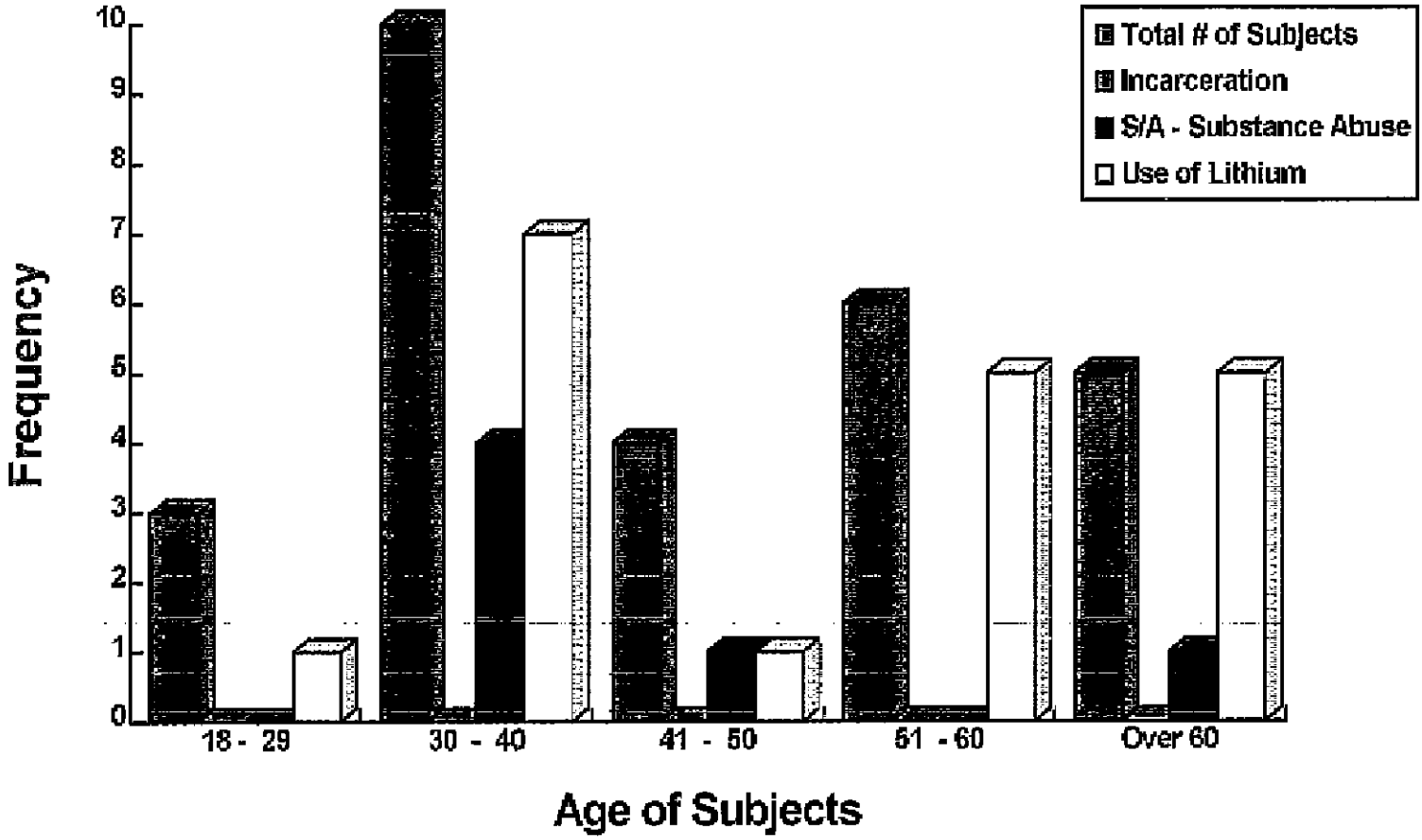
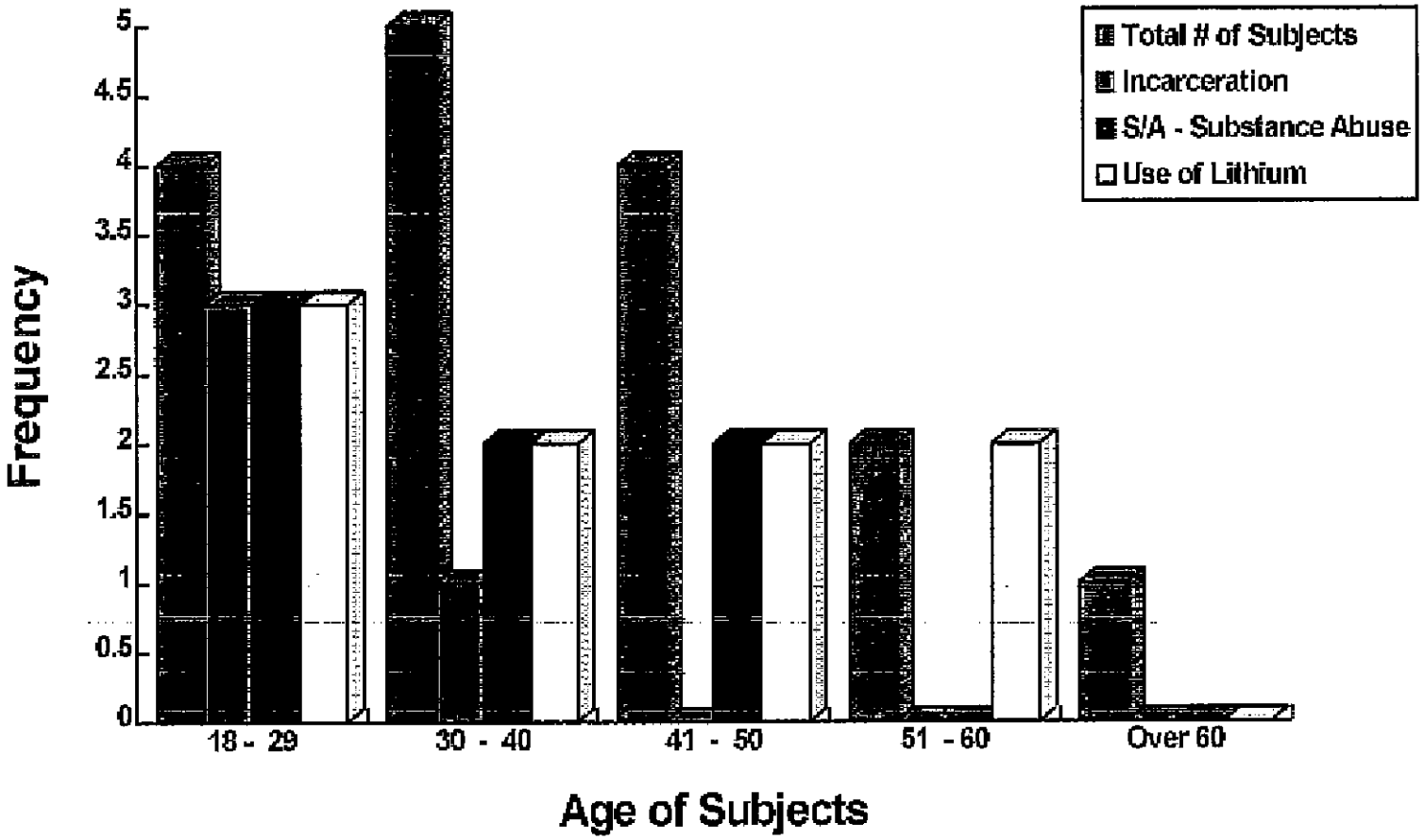
APPENDIX

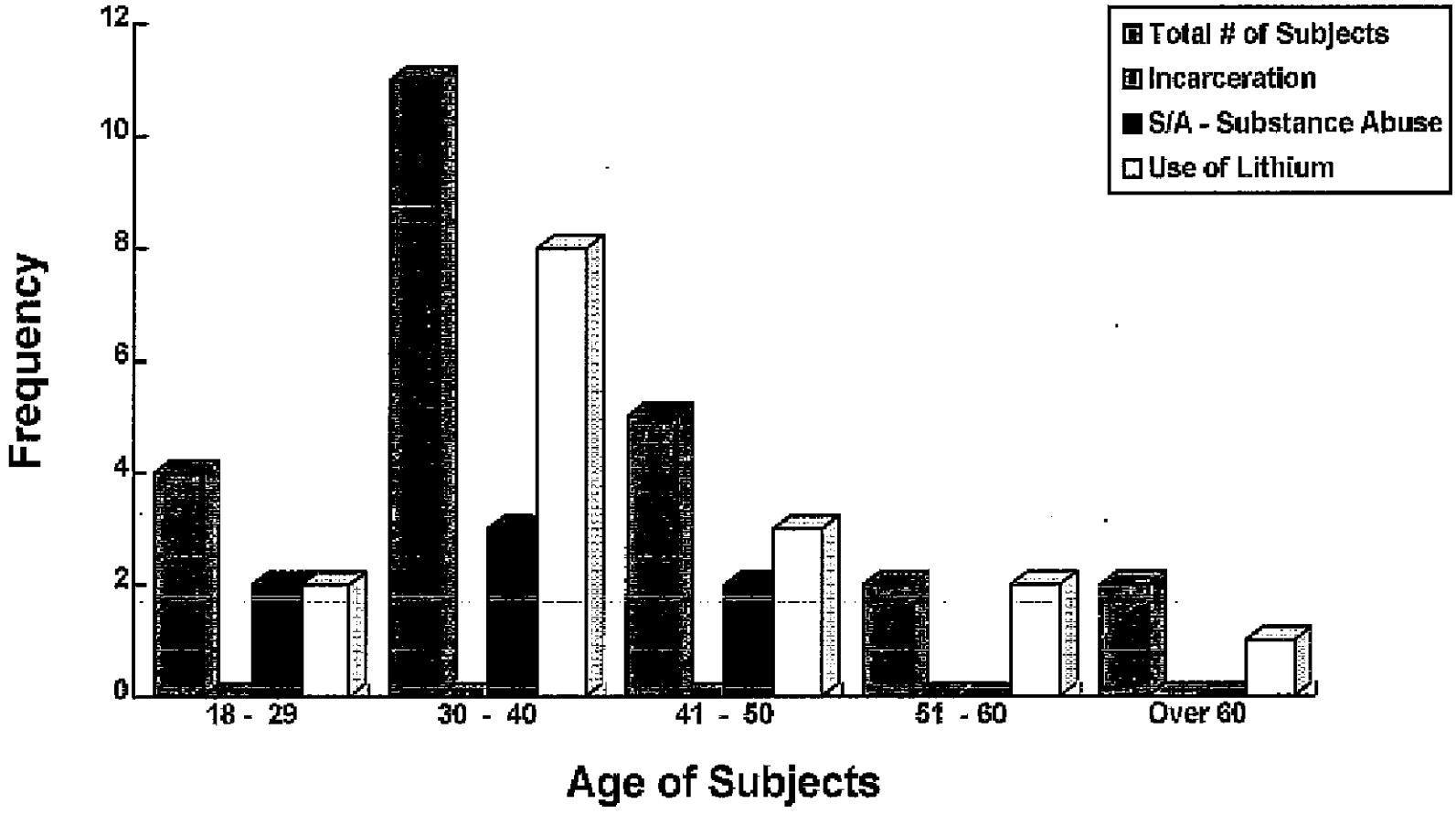
Females Exhibiting Manic Symptoms



Males Exhibiting Manic Symptoms



Females Exhibiting Depressed Symptoms



Males Exhibiting Depressed Symptoms

BENTLER'S COEFFICIENT OF CONCORDANCE

CELL 1

	MALE	FEMALE
HOSPITALIZED IN A MANIC STATE	16	28
HOSPITALIZED IN A DEPRESSED STATE	9	24

. 2075

CELL 2

	MALE	FEMALE
NO INCARCERATION	21	52
INCARCERATION	4	0

- .9083

CELL 3

	MALE	FEMALE
NO SUBSTANCE ABUSE	14	36
SUBSTANCE ABUSE	11	16

- .1216